

Problems and Possibilities of Web-Based Instruction: Transforming Social Studies Methods and Practice

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Abstract

In this article, the authors focus on the use of Web-based instruction in social studies methods courses. They examine in what ways Web-based instruction transforms both teaching and learning and explore the problems and possibilities involved with electronic classrooms, including Web-supported instruction. Their study is classroom action-research, which spanned two years: 2000-2002. From the outset, they believed, based upon an earlier study involving online instruction in their respective classrooms, that Web-based (totally online) instruction and Web-supported (teacher meets class but instruction is supported by the Web) instruction can truly be transformative enterprises in terms of both teaching and learning. Despite the seemingly endless possibilities of Web-supported instruction, problems and/or obstacles lie in the path of a smooth electronic experience for both teacher and student. This study, then, involves the classroom experiences of two social studies methods classrooms in two southern universities. We, the author-researchers, aligned our respective course requirements and materials to offer an electronic classroom experience for our combined classes. This alignment, we believe, allowed us to observe and analyze student engagement with electronic discussion, partnerships, and collaboration.

that is more open to the efficient use of technology for instructional planning, and for collaboration with other social studies preservice teachers. From our perspective, social studies students far too often demonstrate inflexible attitudes concerning new or emerging technologies, and to some extent even older technologies, preferring textbook and lecture-based instruction. As methods instructors, we understand that standards-based accrediting agencies such as NCATE expect preservice teachers to exit from teacher-education programs as competent educational professionals. In today's educational environment, competence includes experience and skill with using and infusing technology throughout the curriculum. For us, the author/researchers, competence also means preservice teachers who are skilled at information retrieval for professional development and collaboration with others, especially in an electronic environment. Through collaboration, we hoped that our students could access museums, archives, and libraries all over the globe and share findings with peers, even when they work and reside in different geographical locations.

Background to Study

For the purposes of this study, we looked largely at research on good teaching as a rationale for this project. The prime reason for this decision resided in the fact that Chickering and Gamson's (1987) seminal work on the principles of good teaching practice has influenced Web-based delivery systems (such as WebCT and BlackBoard) in the design and philosophy of programs. After all, good teaching practice is good teaching practice whether the classroom is a physical one or an electronic one, a sentiment shared by officials of the National Education Association (NEA), an agency in the process of researching online learning and developing a set of evaluative criteria ("NEA working on criteria," 2001). Moreover, Chickering and Gamson's work serves as a foundation for the perspective of this study, owing to its importance in WebCT training literature—one of the electronic platforms involved in the study. Hence, the seven principles of good teaching practice outlined by Chickering and Gamson include the following: (1) encouraging contacts between students and faculty, (2) encouraging cooperation among students, (3) encouraging active learning, (4) giving prompt feedback, (5) emphasizing time on task, (6) communicating high expectations, and (7) respecting diverse talents and ways of learning. For example, Baxter (2001) describes an art instructor who can provide immediate feedback (principle #4) both through the Web and through the use of a "critique room," where she scans in student drawings so that the class may critique them. She can also use graphics software to "correct" student's drawing. Students can immediately see what problems they encountered.

In the implementation of all of these principles, Chickering and Ehrmann (2001) claim that neither technology nor faculty alone can

Now that the euphoria over the promise of technology has somewhat abated and scores of educators have come to accept technology as another "tool" of the classroom, it is time for those of us who use technology in the classroom to examine exactly what advances or transformations we have experienced in terms of teaching and learning. Yet the term technology is multi-dimensional and needs clarification. Technology can mean anything from an overhead projector to Web-based instructional delivery systems. Although new and emerging technologies hold the promise of efficiency and newer modes of teaching and learning, as educators we must go further in our acceptance of technological advances than uncritically embracing any and all technology as "silver bullets" in terms of the learning process.

In this paper, we focus on the use of Web-based instruction in our social studies methods courses over a two-year period. We examine in what ways Web-based instruction transforms both teaching and learning and explore the problems and possibilities involved with electronic classrooms, including Web-supported instruction. From the outset, we believed, based on an earlier study involving online instruction, that Web-based (totally online) instruction and Web-supported (teacher meets class but instruction is supported by the Web) instruction can truly be transformative enterprises, which in terms of teaching and learning meet the high technology expectations of both instructor and student.

For this study, we define the transformative experience—in terms of our students—as moving beyond an ego-centric position and toward one

transform learning in an electronic environment. Students must take action regarding their own learning and create opportunities to "search out additional resources or complementary experiences, establish their own study groups, or go to the professor for more substantial activities and feed back" (p. 5). Heretofore, the emphasis on successful online teaching has resided with the creator of the course and not with course participants. Chickering and Ehrmann's emphasis on student responsibility is an added dimension to the growing body of literature on cyber classrooms, even though their work addresses the physical classroom as well.

One recent report on the "Pedagogy of Online Teaching and Learning," by the faculty at the University of Illinois, supported a broad-scope approach to online instruction, yet at the same time pointed out the importance of emotional interaction among students and between teacher and student. The absence of an emotional component in online courses is seen by some as problematic, especially in terms of undergraduate education (Regalbuto et al., 1999). The social dimension of undergraduate education is important. One college president spoke to this issue when he stated that "college is as much about learning to live as it is about learning from books..." and that "the transformation is remarkable and is as much the product of the general intellectual and social experience on campus as the result of what goes on formally in the classroom. For these students, late-night discussions are much of what college is about, and the role of the football team is truly important. It is hard to imagine distance education, however effective, being truly equivalent" (Hamm, 2000, pp. EB104-106).

The theme "there is no substitute for real classroom interaction" is a common one. Yet, as one "home study" professional pointed out, "when I was in school, you missed a couple of sentences of a professor's lecture and it was gone. Here, (online) you can review the lecture as many times as you want" (Pena, 2001, p. 76). Electronic classrooms or even Web-supported classrooms are not only equivalent in terms of effectiveness, but can also have the potential to transform the way in which learners understand the course material, and provide a social component that is often missed in the traditional classroom—the willingness of shy or introverted students to participate in classroom discussion. Additionally, students have much more time to respond to discussion questions when they are face to face in a time-designated classroom. The ability of the electronic classroom to deliver instruction in a 24/7 format means that learning is no longer confined to exact periods (Schrum, 2000). Students can access courses whenever they have a question or can interact with classmates whenever they choose.

For the purpose of this paper, the authors present a case study based on social studies methods classrooms at two universities. Both courses were Web supported and allowed students unlimited access to all discussion boards as well as peer groups at two very different campuses. The normal "twists and turns"—students who fail to perform adequately in their assigned pairs or groups, inability to pose high-level questions, etc.—experienced in a face-to-face class also occurred in an online environment. Despite the twists and turns inherent in online or online-assisted classes, what computer-assisted learning provides is the ability to store and retrieve data for flexibility in evaluating. In other words, students can store data, which can be retrieved at a later date by the instructor, evaluated, re-stored, and retrieved again by the student.

The instructional benefits include (1) learner interaction with concepts can be stored and retrieved for later analysis, and (2) the immediate feedback the learner receives allows a greater degree of learner control by providing individualized opportunities for review (Hargis, 2001; see Galagan, 2000 and Hicks, 2000 for a discussion on learning). These Web interactions and the ability of the teacher to retrieve (and later analyze) them and then return to the student with questions or state-

ments are invaluable to the learning process. Often, teachable moments go untaught or never revisited, yet through this storage capacity remarks made by students online are preserved and can be used to extend learning. It is not surprising that Bill Gates remarked that the school of the future will not be one that relies on paper and pencil, but rather on collaboration and Web-based curriculum (Robbins, 2001, p. 70).

Even the way we assess the achievement of students is changing, owing to Web-enhanced or online instruction. Today's assessment tools include production rather than paper and pencil tests that seek to measure students' cognitive understanding (Carnevale, 2001). However, one researcher points out that we must move with caution and not simply embrace technology for technology's sake (Leydon, 2001). Any effective learning strategy should bridge the gap between what we know about student learning and what we must do as teachers.

Like the seven principles outlined by Chickering and Gamson (1987), we can point to five common characteristics of effective learning strategy for online learning:

Openness in the Education Process—choice and negotiation within the course, self- and peer-assessment, and tutor-learner relationships. This process should seek to engage learners fully as both participants and contributors to the learning process.

Learning to Learn—student construction of knowledge. Self-awareness of the knowledge construction process is the ultimate goal. Promoting and developing the higher-order cognitive skills of articulation, reflection, analysis, synthesis, problem-solving, and evaluation support the development of these skills and should provide a focus for the design of learning activities.

Prior Knowledge and Experience—existing knowledge and personal conceptions are the starting point for discussion, clarification, and planning of learning.

Problem/Action-Based Learning—problems are the stimulus and focus for student activity.

A Sense of Community—teachers should provide learning activities that encourage co-operation between group members as a means of creating a sense of community and promotion learning as a social process (McDonald, 2001).

This last characteristic—sense of community—was the common rationale that underscored this project. Although the instructors expected students to experience a high rate of anxiety owing to the two electronic platforms, both were well-trained in their respective software (the WebCT professor is a Certified Trainer for WebCT) and believed that their individual experiences in designing and implementing online courses or components would help to ameliorate student anxiety (see Short, 2000, for a discussion of Online Learning faculty preparedness). This case study will cover such elements as how instructors envisioned their joint effort, how students understood the purpose of the project, the ease or lack of ease accessing and utilizing the two online environments, and the extent to which this experiment increased knowledge of subject area, confidence with electronic-based instruction, cultivation of a collaborative spirit (Cooper et al., 1990; Doolittle, 1997), and more important, the transformation of our students from their self-perception of social studies teacher (history, geography, etc.) to one of social educator.

Case Study

James Madison University (JMU) is a traditional state college campus. Set in the heart of the Shenandoah Valley, JMU is located in the small city of Harrisonburg, surrounded by mountains with rural farms and ski areas sprinkled around the valley. Students tend to be traditional: age 18-22, overwhelmingly white, middle to upper middle class, and Christian. Most JMU courses have a fairly even distribution of popula-

tion across Virginia, with only about one third of the total campus population of 15,000 coming from Northern Virginia and neighboring states. However, the majority of the secondary social studies methods students are from either Northern Virginia or the Greater New York metropolitan area, i.e., New Jersey, Connecticut, and suburbs of New York City. Although our teacher education programs do attract some post-baccalaureate and re-entry students, of 22 secondary social studies methods students in the Fall 2001 semester (in two course sections), one student is African-American and two students are non-traditional age. This is a fairly normal distribution for this course. Unlike JMU's Foundations courses, which are overwhelmingly female, the secondary social studies preservice teachers are approximately two thirds male and one third female. Thus, for the JMU author/researcher, one motivation behind the joint project was to reach beyond the simple integration of Web-based instruction by trying to incorporate a mechanism for increasing diversity among the student population. Auburn University at Montgomery (AUM) offered that diversity in several ways: an urban rather than rural campus, more non-traditional aged students, and more minority students.

The courseware package (also referred to in this study as electronic platform) provided to JMU faculty and students is BlackBoard. The courseware is relatively easy to learn and is being widely used on campus. For example, all teacher education faculty were required to have at least one course syllabus electronically posted using BlackBoard by Spring 2002. Faculty training for BlackBoard is relatively uncomplicated, with training completed in less than one day, compared to WebCT, the courseware package used at AUM, which requires a faculty commitment of one day a week for 10 weeks for mastery. BlackBoard students receive an online tutorial or help from their own instructors in learning to use the courseware, AUM students depend on faculty face-to-face instruction for WebCT.

Although few faculty at JMU and AUM are teaching courses completely online, especially at the undergraduate level, many have been integrating Web-based instruction into their courses for several years. In the case of secondary social studies methods, preservice teachers are using the courseware to engage in online discussion of assigned readings, to upload journals and components of the teaching units they are creating into individual group pages, to access course documents and information, to communicate with classmates across course sections as well as the instructor, and to access hyperlinks that will provide them with valuable social studies resources.

The collaboration of JMU and AUM students enables the JMU students to have virtual classmates who are more diverse than the JMU student population. Further, the AUM course instructor was introduced to the JMU students as a course professor from whom they could gain additional expertise and guidance. The introduction of AUM's courseware, WebCT, added a measure of difficulty owing to its more sophisticated level of technology. Additionally, the AUM instructor was notified that several language arts and fine arts majors would be added to the 2001 social studies class as a result of scheduling problems at AUM. These additions created both opportunities and challenges. The opportunities included exposure on the part of social studies students to other academic areas. The challenges are obvious—the instructor cannot just focus on his/her subject area. Consequently, our requirement that students read literature from the field of social studies was complicated by the fact that art and language arts students were added to the course and would not want to read literature outside of their fields. The challenge was met by assigning readings for them, but they could only discuss them with one another, as JMU's course concerned only the single-subject area of social studies.

Other challenges included two very different electronic platforms. As instructors, we decided to use both courseware packages for several

important reasons. First, the two universities in this study had already purchased expensive licenses for electronic course delivery and the two platforms—WebCT and BlackBoard—were quite different. Naturally, students on each campus would use their own university's electronic platform across several of their other courses. Thus, for students on both campuses, it was important for them to have some level of electronic continuity. Second, we were aware that preservice teachers are not as adept at transferring technology skills as might be desirable based on an earlier collaborative project. Thus, a course format that required students to understand the functions of their own courseware (BlackBoard/WebCT) and identify similar functions in other courseware became an important teaching objective. For example, students in this study now understand that "forums" in BlackBoard and "Bulletins" in WebCT serve a similar function. Theoretically, a solid comfort level with multiple courseware packages will assist preservice teachers in adapting quickly to whatever software their future school districts provide.

Auburn University at Montgomery is a commuter campus located 10 miles to the east of the capital city. The average age of an AUM student is 28, with a total school enrollment of 5,000 plus. The School of Education is one of the largest schools in the University and shares programs with Auburn University at Auburn. For example, the Alternative Masters Program (MED) is offered only on the Montgomery campus, while other educational programs are found only on Auburn's main campus. Some students at AUM drive two hours or more to attend classes, as Alabama is still largely rural, with three or four of its major cities scattered some two hours or more apart. Although residential halls are limited on the Montgomery campus, the University has recently broken ground for a new high-rise dormitory.

The racial makeup of AUM is about 30-35% African-American, with a modest number of international students who train and play sports for the University. AUM is regularly ranked number one in its league in several sports, including women's tennis, soccer, and women's basketball. The sports programs bring in students from South Africa, Australia, Sweden, Germany, Holland, and several countries in Latin America. One of the strengths of this collaborative project is the multicultural, multi-ethnic, and racially diverse student body that AUM brings to the project.

In reference to Chickering and Gamson's (1987) principles for good teaching, the joint AUM/JMU methods course format aligns with their findings in several important ways:

1. Contacts between students and faculty have been encouraged by using both the threaded discussion and the e-mail areas to enhance communication.
2. Cooperation and collaboration among students have been increased by pairing students for unit topics across the three sections of the course. Every student has a partner in at least one other section.
3. Active learning has been encouraged through threaded discussion of assigned readings. For example, each student must post an initial response to the assigned article and then must reply to at least two other students from different course sections than their own.
4. Students receive prompt feedback using the e-mail function of the courseware. After the uploaded assignments are downloaded and read by the instructors, the instructors issue e-mailed responses. Often students are fortunate enough to have responses from both instructors!
5. The use of threaded discussion has increased time on task, often to the chagrin of students who now find that they must actually complete the assigned readings in order to respond in the appropriate discussion forums. When instructors monitor threaded

- discussion in a timely manner, students must stay on top of their assigned work.
6. High expectations relate particularly to the expected quality of the instructional units preservice teachers prepare. Throughout the project period, students worked with partners. The instructors' expectations were even higher as they assumed that collaboration would enhance the quality of the completed project.
 7. In relation to the notion of diverse talent and ways of learning, one of the unanticipated benefits, as mentioned earlier, was the presence of language arts and art methods students in the AUM course. This provided several JMU students with an opportunity to collaborate with a different academic discipline in the creation of either an interdisciplinary or a cross-disciplinary instructional unit.

Analysis of Student Data

Students were first asked to post their interests on AUM's WebCT course Bulletin Board. The instructors imagined students would post their areas or topics of interest and that these would be viewed by both AUM and JMU students. Students would then seek out partners at the other institution based on interests. As it turned out, we had to assist our students by pairing them together with those of similar interests. Our students, it seemed, were reluctant to "trust" others with their ideas for instructional units. What compounded the challenge of pairing was the addition to the AUM social studies methods course of language arts and fine arts students. The students in those curriculum areas could not imagine how they would be able to work with social studies students on a unit of instruction. Conversely, social studies students could imagine working in other discipline areas as long as the project or unit conformed to a traditional social studies approach. This action-research project "shaped up nicely" in terms of challenge.

Additionally, at AUM, enrolled methods students were both graduate and undergraduate, whereas JMU's methods' students were undergraduate. Despite the obvious challenges, as course instructors we assured our students that we would constantly monitor the progress of the groups and intervene when necessary; it is likely that prior negative experiences with grouping projects accounted for some of their apprehension. As students posted their areas of interests, we observed an almost cavalier attitude about the impending collaborative endeavor. Two JMU students wrote the following:

All right folks...Here is the deal...Myself and M.S.-two really cool guys-are looking for someone down at AUM to work with us. We are doing propaganda throughout history!!! We are talking about an awesome topic: Paine's Commons[sic] Sense, WWI posters, WWII Rosie the Riveter. Join us if you want to do the best lesson plans from JMU to AUM. Contact me as soon as possible, for I know this topic is pumping everybody up!

At this point in the semester, students could not appreciate the daunting task ahead of them as they would struggle to learn the "art" of creating a unit of instruction. The initial posting period seemed to connect the highly motivated students and even a few who were apprehensive. One AUM language arts student connected with a student at JMU and decided to construct a unit on medieval society. As the JMU student wrote, "I just wanted to inform you that Rachel and I have agreed to work together. She will use English/Lit background for Beowulf and Sir Gawain/Green Knight, while I will attempt to explain feudalism and other pressing issues of the dark ages."

As social studies instructors we recognized our daunting task-to clarify for this social studies student that feudalism was a social, economic, and political feature of the medieval period and not the Dark Ages. The electronic classroom allowed us to provide immediate feedback and cor-

rect this student's misconception prior to the development of the instructional unit. Often, methods' instructors find flaws in knowledge only after the completed unit is handed in at the end of the semester. This early intervention cautioned the student about the importance of correct terminology and chronology.

Others offered the following: "...to be honest I don't know what to write here, but I will say that I HATE American History with a passion. I would much rather spend my time teaching European or Asian history;" "I am in the second year of a master's program at JMU. I am interested in developing a unit on the Cold War;" "...I have a unit plan somewhat already worked out from other classes and wanted to know if you or any one else would be interested in doing a unit concerned with the first American civilizations;" and, "My major is Secondary Language Arts and I am scared to death to be paired with a History student via computer. I do feel however, that this experience will benefit me in the future and as long as we can all work together, we will make it with flying colors."

Generally, the postings seemed to help students at both campuses come together and agree on topics. However, well past the mid-term, a few students-in particular a fine arts major at AUM-still did not have a group or partner. This particular student insisted on constructing a unit on color theory and could not imagine how her material would "mesh" with a different subject area. She admitted that she intended to use artists' works such as Monet to demonstrate use of color, at which point the AUM instructor suggested that she work with a group that had formed around their common interest in 19th century themes.

Following the exercise where students posted their areas or topics of interest, the September 11th attacks held everyone spellbound as we attempted to deal with the tragedy in our two classrooms. In an effort to provide students with an opportunity to express how they had understood the events of September 11, we posted a statement on the JMU BlackBoard to which students responded. Their replies ranged from expressions of outrage to reflections on how and why the U.S. is "hated" in other countries. Some used this opportunity to "scold" other students for perceived unpatriotic remarks-"I do believe that America has been on a high horse for some time." And, as one might expect from students residing in the deep South, some took the opportunity to offer a religious answer to the September 11th tragedy-it's in God's hands." However, none posed what one might consider to be essential questions: How is the U.S. perceived throughout the world? What should we as engaged citizens know about the history of the Middle East? From where has the U.S. drawn its foreign policy regarding political proselytizing? What must we do as citizens to ensure our nation's safety? Do national emergencies such as terrorist bombings call for a suspension of civil liberties?

After several conversations regarding student responses to the 9/11 attack, the AUM instructor posted a reply to the combined electronic class.

As I read with interest your responses to my posting on the September 11th tragedy, I was struck by several items that concern me as a professor who prepares teachers for our public classrooms. Without addressing any one student in particular, I hope that my words will be instructive to all. One, some of you who will teach history allow yourselves to be drawn into dualistic explanations rather than looking at levels or dimensions of understanding. For example, the political right does not stand for building up the military while the political left is portrayed as the humanitarians of the world. Any perspective taken to the extreme is dangerous. Remember, Plato advocated a strong military to defend the body politic, not for aggression. Those of you who believe that Democrats or in your terms, the left, in general, love the poor, while the political right (in your terms Republicans) need to remember that Chelsea Clinton did not attend

one of Washington D.C.'s inner city schools. Promoting spending programs for the poor may be the right thing to do, but it doesn't hurt the promoter at the polls either. President Clinton who publicly proclaimed a special affinity for the poor owing to his own humble upbringing in Hope, Arkansas, sent his own child to one of the most expensive private schools despite the fact that Pennsylvania Avenue is in the heart of Washington D.C.'s inner city.

As for those of you who have tried to draw parallels between the United States' decision to drop the bomb on Japan during World War II and the attack on America by foreign terrorists, I must question what you have learned in your history classes. You are not comparing apples with apples. When the people in Hawaii on that peaceful Sunday morning of December 7, 1941 looked up at the sky and saw airplanes bearing down on the ships in Pearl Harbor, they were looking at warplanes with the rising sun, the symbol of Japan, painted on the body of the plane, not their own commercial aircraft. While the attack itself was considered a "sneak attack," it was crystal clear that the Japanese government was the sponsor of this wartime aggression. The rules of modern warfare generally called upon warring powers to fight it out with armies. And armies, with the exception of mercenaries, are military instruments of nations. Tuesday's attack was perpetrated by individuals whose personal hatred for the United States is predicated on a distorted interpretation of Islamic belief. Listen to the words of Islamic Jurists who have been explaining the teachings of the Koran since the attacks.

While the United States is or cannot be considered any more perfect than any other nation, the memories of some Americans have failed them. They do not seem to recall the rebuilding plans paid for the U.S. when Germany was nearly bankrupt following World War II. They also do not remember the Berlin Airlift where bombers and assorted planes landed 24/7—minutes apart in order to save the people of Berlin from starvation following the blockade by the Soviet Union during the Cold War. Some do not seem to know that the U.S. has sponsored relief and medical programs all over the world. In return, the debts owed by foreign countries helped by the U.S. are often never repaid. Don't be too quick to indulge in self flagellation. Remember, the Barbarians sacked Rome—the greatest and most advanced technological empire at that time—while the people and leaders of Rome helped to destroy it from the inside.

Finally, for students in any discipline, you need to ask yourself the following: What do I need to know about the issue at hand in order to be an effective classroom teacher? The fact that you teach Art or Music will not stop students from posing questions, in the wake of events such as the Oklahoma bombings or the World Trade Center attacks, that might seem better suited for a social studies classroom. Are you informed enough to answer?

Far from asking essential questions, AUM students seemed more preoccupied with how to integrate what had happened in New York City and the Pentagon with their religious beliefs. More than a few did not seem to be able to formulate an answer as to how they would deal with these events in a classroom. JMU students, on the other hand, seemed to gravitate around one or two strong personalities (peers) who persisted in "bashing" the United States without being able to separate the terrorist attacks on September 11th from the 1941 bombing of Pearl Harbor by Japan. They almost took a "tit-for-tat attitude." The whirlwind, however, only existed in cyberspace. Although we hoped that this exchange of ideas and opinions in the electronic classroom would carry over into the physical classroom, that did not seem to be the case. The transformation anticipated by the author/researchers simply did not occur. Perhaps students shifted their mental burdens to the Internet and were ready to go "back to business as usual," or perhaps they did

not know where to take their arguments after posting them on BlackBoard. In any event, students appeared content to leave the events of September 11th behind, which is something neither of us as instructors were able to do.

On reflection, we as methods professors/instructors came to several important understandings about our expectations regarding technology and transformation: one, that technology holds only the promise of transformation. It cannot effect transformation by virtue of its attributes. Two, that our own personal experiences as college students during the heady days of social activism have colored our expectations of our own students, whose generational understandings and experiences are vastly different from our own. And three, that simply giving students an electronic forum to express their views is only half of the task of developing engaged students who in turn will go into the teaching profession with the ability to sharpen the minds of their own students and help to make them socially aware and engaged citizens-in our minds, the primary goal of social studies.

Pitfalls and Positives

From the JMU perspective, this experience has been educative. The first year this project was initiated (Fall 2000), the instructors were never really able to get the courses synchronized and therefore even the threaded discussion was never really integrated the way the instructors had intended. To remedy that, during the summer of 2001, the instructors spent more time matching their syllabi, readings, and assignments for the courses. One problem has been that the JMU classes met on Tuesday/Thursday mornings and the AUM students met on Wednesday evening. Also, on both campuses, servers were being upgraded and the campus experienced "downtimes" when students were unable to access one or the other course. Additionally, computer virus scares, recent national and international events, religious holy days, and academic conferences keep interrupting normal course schedules.



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Thus, although this effort was more successful than the first attempt, fine-tuning should be a constant endeavor. Another "glitch" has been that although WebCT allows students to self-enroll in the class, the JMU courseware is controlled by central registration through PeopleSoft. Therefore, the computer center at JMU had to create "dummy" students and enroll them into BlackBoard. This created a time lag during the first week or two, as course registrations were still unstable, JMU was waiting for AUM students, the JMU computer center was backlogged with course requests, and so on.

It should be noted that classes did not start the same week on both campuses. Once AUM students entered BlackBoard, they needed to go to the "personal information" area and change their "dummy" e-mails to real addresses. Some students failed to do this, causing frustration on the part of JMU students who were ready to start the collaboration process and whose mail kept "bouncing back." On the AUM side, the WebCT courseware has internal e-mail that requires JMU students to enter WebCT to check for messages. Because JMU courseware has e-mail that goes out to the students' regular mailbox, JMU students continually forgot to check AUM for their messages.

Thus, the ideal communication the instructors envisioned got bogged down by the reality of their students' desire and ability to remember and/or to follow directions. The hoped-for communications to create partnerships based on common interests required instructor intervention during the 2001 project period. At one point, the AUM instructor spoke by cell phone to JMU students during their class time to pair students for unit topics.

The communications problem may have been exacerbated by the reluctance of some students to enter into "virtual collaborative partnerships." Traditionally, teaching has been a relatively isolated profession in terms of teacher planning. Here, we have altered the model by insisting on collaboration. We have further muddied the waters by insisting that those collaborations have a distance-learning component. There has been some level of student unhappiness at this requirement. Some students viewed the collaboration project as a burden rather than an opportunity to share the workload. That was not the instructors' intent. In fact, part of the purpose of the joint project was to provide students with peer support as they created their first instructional units. The instructors also believed that collaborating students would have less, not more, work to do as they shared in the collection of materials and so on that one needs in order to create an instructional unit. In the future, we as instructors will refine what worked well and revisit components of the experiment that seemed problematic.

Conclusion

The possibilities of Web-enhanced or Web-supported instruction in social studies methods classes are seemingly endless. The storage and retrieval aspect, which allows for later analysis, is an especially valuable element. Students can respond to questions posed by instructors on Web boards that are then stored. In opposition to the face-to-face classroom, where teachers pose questions and students respond, few have the opportunity to go back and rethink answers. Additionally, instructors usually move through a certain amount of material and often fail to go back and "pick up" on errors in judgment or thought posed by students. Web-supported classrooms offer instructors ample time to review and reflect on student response, after which they can post thoughtful and informative or instructive feedback. We found this to be the case as students struggled to make sense of their coursework during and after the September 11th terrorist attacks.

As teachers and methods instructors, we seized the teachable moment and allowed our students to electronically discuss this national event, then analyzed their responses and directed them to think less about personal impact and more about essential questions and what they needed to know as teachers and engaged citizens. Additionally, when students posted their areas of interest and began to

pair up on instructional unit topics, we were able to see early on areas of student misconceptions or misinformation—e.g. the student who confused the feudal period with the Dark Ages. Hence, we were able to intervene in the beginning and not wait until the final unit was evaluated.

Despite the endless possibilities of Web-supported instruction, we strongly suggest that important problems lie in the path of a smooth electronic experience for both teacher and student. We are aware that some of our difficulties could have been reduced by selecting a single distance learning platform, either BlackBoard, WebCT, or an entirely different courseware package unfamiliar to both groups. However, as instructors we agreed that there are benefits to requiring preservice teachers to cope with the frustrations of multiple courseware platforms. These benefits include flexibility and transfer of technology skills. The ability to problem solve is increased when students have to figure out how each electronic platform works and transfer that knowledge back and forth across platforms. Moreover, problem solving is one of the characteristics of effective learning.

However, some problems—for example, the comfort level of students regarding ownership of the units they were creating—may never be solved. In this experiment, both groups experienced a high level of anxiety owing to the electronic classroom, where students only knew each other through e-mail and electronic postings. Even the ability to chat using the chat room or the drawing tool (whiteboard) that allowed multiple students to sketch out designs was not enough to raise the comfort level for the 2001 group.

Only within the past several weeks (January 2004) have we received data from the state of Alabama's professional evaluation form (PEPE) covering the years 2001-2002 and 2002-2003. This new form is used by school administrators to evaluate first-, second-, and third-year teachers in the areas of planning for instruction, classroom management, and student achievement. First-, second-, and third-year teachers are evaluated three times during each of their first three years of teaching. Of those evaluated (some students leave the state to teach elsewhere) all AUM students who participated in the 2001 collaborative project with JMU, including art majors, received their highest marks in the area of planning for instruction. Although we cannot claim that the collaborative endeavor of the experiment is directly connected to these evaluation results, we do believe that the electronic collaborative component of our respective courses played an important role in this area of student achievement, particularly in the area of subject matter knowledge.

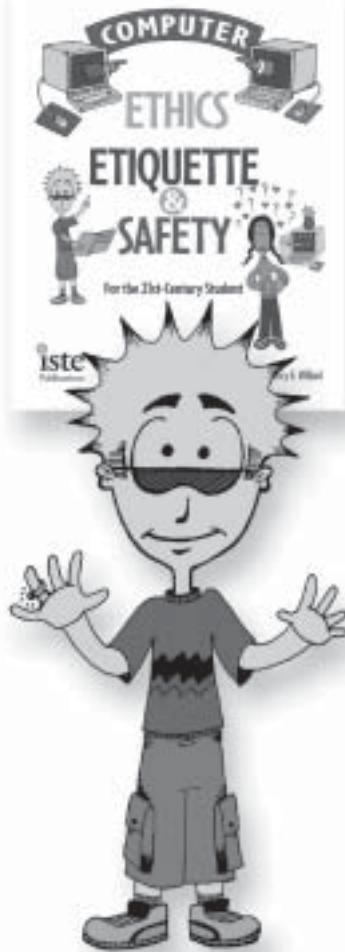
We hope to report in future collaboration projects that students look positively on the opportunity to form virtual partnerships and collaborations rather than view them as additional burdens, although we believe that what is burdensome to our students had less to do with the online nature of the assignment and more to do with the cooperative learning (collaborative) aspect. New and emerging studies into cooperative learning suggest that students are not as satisfied with the process and outcome as earlier believed. In the end, perhaps the real transformation occurred within us, the instructors, whose own prior experiences as college-aged social activists convinced us that the technological world of our students with its promise of efficiency and global reach just might hold the key to putting them in touch with that "social educator" within.

References

- Baxter, K. (2001, July). Online learning. *American Artist*, 65(708), 14–17.
- Carnevale, D. (2001, April). Assessment takes center stage in online learning. *Chronicle of Higher Education*, 47(31), A43–A46.
- Chickering, A. W., & Ehrmann. (2001, October). Implementing the seven principles: Technology as lever. *AAHE Bulletin*. Available: <http://www.tltgroup.org/programs/seven.html>.
- Chickering, A. W., & Gamson, Z. F. (1987, March). Seven principles for good practice in undergraduate education. *AAHE*

- Bulletin.* Available: <http://honolulu.hawaii.edu/intranet/committees/FacDevCom/guidebk/teachtip/7princip.htm>.
- Cooper, J., Prescott, S., Cook, L., Smith, L., Mueck, R., & Cuseo, J. (1990). *Cooperative learning and college instruction*. Long Beach, CA: California State University Foundation.
- Doolittle, P. E. (1997) Vygotsky's zone of proximal development as a theoretical foundation for cooperation learning. *Excellence in College Teaching, 8*(1), 83–103.
- Galagan, P. A. (2000). The e-learning revolution. *Training & Development, 54*(12), 24–31.
- Hamm, S. (2000, December 11). The wired campus. *Business Week, #3711*, EB104-112.
- Hargis, J. (2001). Can students learn science using the Internet? *Journal of Research on Computing in Education, 33*(4), 475–488.
- Hicks, S. (2000). Evaluating e-learning. *Training & Development, 54*(12), 75.
- Leydon, B. (2001). The e-everything revolution: What's a university to do? *Educause Review, 36*(1), 62–64.
- McDonald, J. (2001). Online learning: A radical pedagogy? *Adults Learning, 12*(5), 20–23.
- NEA working on criteria that will judge quality of online learning. (2001). *Electronic Education Report, 8*(11), 3–5.
- Pena, A. (2001). The virtual classroom. *Hispanic, 9*(76), 1.
- Robbins, A. (2001). Tech ed. *PC Magazine, 20*(9), 70.
- Schrum, L. M. (2000). Guarding the promise of online learning. *Education Digest, 66*(4), 43–48.
- Short, N. (2000). Online learning: Ready, set, click. *RN, 63*(11), 28–33.
- Regalbuto, J., Anderson, R., Aref, H., Burbules, N., Cook, A., D'Arcy, C., et al. (1999). *Teaching at an Internet distance: The pedagogy of online teaching and learning. The Report of a 1998-1999 University of Illinois Faculty Seminar*. Available: http://www.vpa.uillinois.edu/tid/report/tid_report.htm.

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